Introduction to the Environmental Public Health Indicators Project

Environmental public health indicators (EPHIs) can be used to assess our health status or risk as it relates to our environment. They may be used to assess baseline status and trends, track program goals and objectives, and build core surveillance capacity in state and local agencies. The best indicators are those that reliably predict the relationship between human health and the environment, are routinely collected, and have well accepted definitions and data collection standards.

Indicators provide information about a population's health status with respect to environmental factors and may be particularly useful when clear measurable links are not available. As such, they can measure health or a factor associated with health in a specific population. For example, because the amount of lead in paint in older homes is difficult to measure, we use blood lead measurements in children to indicate both the lead paint hazard and the risk for childhood lead poisoning. Similarly, we measure microbial contamination in the water to indicate the risk for gastrointestinal illness.

There are few diseases for which clear environmental etiologies have been established. Environmental health assessment efforts therefore need information not only for the diseases that are environmentally related, but also for potential environmental hazards and exposures that pose a risk to human health.

To address this gap in our understanding of environmentally related diseases, the Council of State and Territorial Epidemiologist and CDC identified specific areas and indicators that should be evaluated. The future evaluations of these indicators should consider how well the indicator predicts human health and/or environmental conditions and data availability. In addition, the evaluators should also consider how best to standardize data collection and define the indicators. We believe that the development of a common set of reliable indicators for tracking environmental exposures and adverse health effects could then be used by state programs to focus on priority surveillance systems and better monitor the health status of their communities.

The national application of these proposed indicators could allow states to connect their work with that of other states and provide a tool for regional assessment of the issues that cross state boundaries.